

TRANSVAGINAL SUTURING SYSTEM

Abstract

A method and device for the placement of sutures and for the purpose of approximating tissue. The invention relates to devices for approximation, ligation and fixation of tissue using a suture, to various constituent parts comprising said devices, and particularly to the placement of sutures into certain difficult to access ligamental structures, to the approximation of tissue separated by means of an endosurgical trocar being inserted into a body cavity, and to approximation, ligation, and fixation of body tissue using both traditional open surgical and endosurgical techniques and instruments. The invention provides for the loading of suture material including needles into the device, introduction and placement of the device into the body cavity, with the distal end having deployable needle guides, extending the needle guides either simultaneously or individually to the periphery of the wound, engaging the wound with the needle guides, driving the needles and suture material through the tissue to be approximated into a catch mechanism, retracting the needle guides and withdrawing the device, leaving a loop of suture material in the margin of tissue. The suture may then be tied to approximate the wound and excess suture material cut off. The invention also provides for the placement of sutures for the endoscopic approximation, fixation, and ligation of tissues within a body cavity including the driving and retrieval of needle and suture combinations, and facilitating the tying of knots.